

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: ) Art Unit: 1639  
 )  
THISTED, et al. ) Examiner: LUNDGREN, J.  
 )  
Serial No.: 10/572,644 ) Washington, D.C.  
 )  
Filed: August 25, 2008 ) July 29, 2009  
 )  
For: A METHOD FOR OBTAINING ) Docket No.: THISTED=1A  
STRUCTURAL INFORMATION )  
CONCERNING AN ENCODED... ) Confirmation No.: 4397

COMMUNICATION OF CORRECTED CLAIMS SECTION

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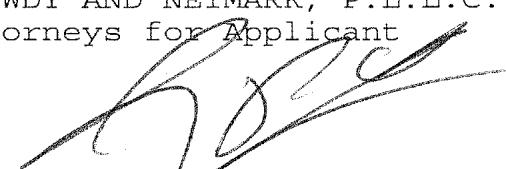
S i r :

It has come to our attention that there is an error in the listing of claims presented within the Preliminary Amendment 2 filed on August 25, 2008; it does not list "claims 21-68 (cancelled)", cp. amendment filed March 21, 2006.

We enclose a corrected claims section.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By:   
Iver P. Cooper  
Reg. No. 28,005

624 Ninth Street, N.W.  
Washington, D.C. 20001  
Telephone: (202) 628-5197  
Facsimile: (202) 737-3528

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for identifying display molecule(s) having affinity towards molecular target(s), comprising the steps of

mixing one or more molecular target(s) associated with target oligonucleotide(s) and a library of bifunctional complexes, each bifunctional complex of the library comprising a display molecule attached to an identifier oligonucleotide, which codes for said display molecule,

coupling to the target oligonucleotide(s) the identifier oligonucleotide of complexes comprising display molecules binding to the target, and

deducing the identity of the binding display molecule(s) and/or the molecular target(s) from the coupled product between the identifier oligonucleotide(s) and the target oligonucleotide(s).

2. (Original) The method of claim 1, wherein the display molecule is a reaction product of two or more chemical entities and the identifier oligonucleotide comprises codons identifying the chemical entities.

3. (Original) The method of claim 1, wherein one or more members of the library are potentially binding compounds tagged with identifier oligonucleotides.

4. (Previously Presented) The method according to claim 1, wherein the chemical entities are precursors for a structural unit appearing in the display molecule.

5. (Currently Amended) The method according to ~~any~~ claim 1, wherein some or all of the chemical entities are not naturally occurring  $\alpha$ -amino acids or precursors thereof.

6. (Previously Presented) The method according to claim 1, wherein each codon comprises 4 or more nucleotides.

7. (Previously Presented) The method according to claim 1, wherein the display molecules of the library complexes are non- $\alpha$ -polypeptides.

8. (Previously Presented) The method according to claim 1, wherein the display molecules of the library complexes are non-nucleic acids.

9. (Previously Presented) The method according to claim 1, wherein the display molecule has a molecular weight less than 2000 Dalton, preferably less than 1000 Dalton, and more preferred less than 500 Dalton.

10. (Previously Presented) The method according to claim 1, wherein the identifier oligonucleotide uniquely identifies the display molecule.

11. (Previously Presented) The method according to claim 1, wherein one or more chemical entities are transferred to the nascent display molecule by a chemical building block further comprising an anti-codon.

12. (Original) The method according to claim 11, wherein the information of the anti-codon is transferred in conjunction with the chemical entity to the nascent complex.

13. (Currently Amended) The method according to ~~any of the preceding claims~~ claim 1, wherein the chemical entities are reacted without enzymatic interaction.

14. (Previously Presented) The method according to claim 1, wherein the codons are separated by a framing sequence.

15. (Previously Presented) The method according to claim 1, wherein the display molecule and the identifier oligonucleotide are joined by a selectively cleavable linker.

16. (Original) The method according to claim 15, wherein the linker is cleaved by irradiation.

17. (Currently Amended) The method according to claim 1, wherein the library comprises at least one complex and, if it

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comprises, two or more ~~different~~ complexes, they are not identical.

18. (Previously Presented) The method according to claim 1, wherein the library comprises 1,000 or more different complexes.

19. (Original) The method according to claim 1, wherein the molecular target is of a biological origin.

20. (Previously Presented) The method according to claim 1, wherein the molecular target is immobilized on a solid support.

21-68 (Cancelled).